

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Saint-Gobain Performance Plastics

#### Washington Manufacturing Services

#### Saint-Gobain Performance Plastics Develops Sampling Plan To Save

##### Client Profile:

Saint-Gobain Performance Plastics (SGPPL) is the world's largest processor of high performance polymer products, including fluoropolymers, silicones, and high-temperature thermoplastics. Founded in 1956, the company's Engineered Components Group produces a wide variety of engineered composite and thermoformed products to serve the defense, commercial aircraft, and aerospace markets. Located in Seattle, Washington, the Engineered Components Group employs 123 people in a 123,000 square foot facility.

##### Situation:

SGPPL first learned about Washington Manufacturing Services (WMS), a NIST MEP network affiliate, through internet research on manufacturing resources. SGPPL and WMS worked together for the first time to implement a set of internal auditing and corrective action processes to improve the effectiveness of the Group's AS 9100/ISO 9001 quality management system. Upon successful completion of this project, SGPPL engaged WMS's help again to address a difficult quality challenge within the operation. A major aerospace customer required a time-intensive 100 percent inspection of process control samples prior to shipment. If approved by this customer, a sampling plan for inspection would result in significant savings for the facility.

##### Solution:

WMS called in one of its trusted resource providers, Fulcrum Associates, to develop an approvable process for the sampling plan. Drawing on its familiarity with SGPPL's customer, Fulcrum devised a statistically valid plan which would still meet the strict quality specifications that this customer demanded. Fulcrum diligently worked with SGPPL to ensure that its customer was comfortable with all aspects of the new plan. After considerable effort on the part of both SGPPL and Fulcrum, the sampling plan was accepted. WMS managed the project from beginning to end, and was the one point of contact for the customer throughout the entire project. WMS specializes in matching the needs of its client with resources throughout the state, and provides project management services for every third-party engagement. Thanks to its help, SGPPL estimates that its new sampling plan will reduce inspection costs by 66 percent.

##### Results:

[www.mep.nist.gov](http://www.mep.nist.gov)



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Devised a plan to move from 100 percent inspection to a sampling inspection.  
Estimates reducing inspection costs by 66 percent.  
Improved customer satisfaction.

### **Testimonial:**

"Our customer's requirements for developing sampling plans were not directly applicable to the process control testing we were performing. Washington Manufacturing Service's resource provider, Fulcrum, contracted an expert in Statistical Process Control to verify that an adaptation to the sampling requirements was statistically valid and then created a program from scratch which satisfied the customer's sampling requirements. We did not have the resources internally to develop a sampling plan like this; contracting outside help was the most effective way to reduce our testing costs."

Ken Tuomi, Quality Manager, Seattle Operations